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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,390	09/26/2003	Fangjun Jiang	81076421/201-1498	2389
28395 7590 12/19/2007 BROOKS KUSHMAN P.C./FGTL 1000 TOWN CENTER 22ND FLOOR SOUTHFIELD, MI 48075-1238			EXAMINER VANAMAN, FRANK BENNETT	
			ART UNIT 3618	PAPER NUMBER
			MAIL DATE 12/19/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/605,390

Applicant(s)

JIANG ET AL.

Examiner

Frank Vanaman

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-16, 23 and 25-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-16, 23 and 25-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/31/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **Continued Examination Under 37 CFR 1.114**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 31, 2007 has been entered.

### **Status of Claims**

2. Claims 1-4, 6-16, 23 and 25-27 are pending
3. Claims 5, 17-22 and 24 are canceled

### **Information Disclosure Statement**

4. Applicant's Information Disclosure Statement, filed with the request for continued examination on Oct. 31, 2007, has been considered.

### **Claim Rejections - 35 USC § 112**

5. Claims 1-4, 6-16, 23 and 25-27 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In each of claims 1, 11 and 23, the claim recitation and appears to present a contradictory scope, in that each claim now relates limitations recited in an alternative fashion to parallel limitations recited in a cumulative fashion. In claim 1 at lines 6-9 (and also at lines 14-16); claim 11, lines 6-9 (also note lines 14-17) and claim 23, lines 6-10 (also note lines 15-17), the recitations present a plurality of conditions in an alternative manner, whereas in claim 1 at lines 10-13, claim 11, lines 10-13 and claim 23, lines 11-14 the plurality of previously recited conditions are compared in what appears to be a cumulative manner rather than an alternative manner. As such, the claim recitation appears contradictory, and the claim scope is not clear.

### **Claims Not Rejected over the Prior Art**

6. Claims 1-4, 6-16, 23 and 25-27 are not rejected as being anticipated by or unpatentable over the prior art, however they are not in condition for allowance at this time in view of the condition described in the claim rejections based on 35 USC §112, second paragraph section above.

### **Response to Comments**

7. Applicant's amendment has been entered in the application, and the comments filed therewith have been carefully considered. Applicant's assertion that the claims as now written are allowable is noted, however in view of the clarity issues set forth above the claims are not in condition for allowance.

Applicant's submission of the reference to Osawa in the most recent IDS is noted, particularly with regard to the explicit teaching in Osawa to base a control of engine start/stop on a catalytic converter temperature (S5, figure 2; S15, figure 3). This reference may prove pertinent to the claim recitations in view of the reference to Imada et al. (now cited below) which teaches that it is quite well known to determine a catalytic temperature condition based on a measured engine run-time (see paragraph 0047 in Imada et al., for example), providing the suggestion that one of ordinary skill in the art would be well aware an engine run-time may be substituted for catalytic converter temperature values.

As regards claims currently rejected under 35 USC §112, second paragraph, please note that rejections under 35 USC §102 and 103 should not be based upon considerable speculation as to the meaning of the terms employed and assumptions as to the scope of the claims when the claims are not definite. See *In re Steele* 305 F.2d 859, 862, 134 USPQ 292, 295 (CCPA 1962). When no reasonably definite meaning can be ascribed to certain terms in a claim, the subject matter does not become anticipated or obvious, but rather the claim becomes indefinite. See *In re Wilson* 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). As such the currently pending claims may be

subject to prior art rejections not set forth herein upon the clarification of the claim language.

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Imada et al. (US Pre Grant Publication 2002/0119080) teach that it is well known to relate catalytic converter temperature to engine run-time.

1. Any inquiry specifically concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 571-272-6701.

Any inquiries of a general nature or relating to the status of this application may be made through either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A response to this action should be mailed to:

Mail Stop \_\_\_\_\_  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450,

Or faxed to:

PTO Central Fax: 571-273-8300

**F. VANAMAN**  
**Primary Examiner**  
**Art Unit 3618**



12/13/07